





Course Title Credits

Introduction to Biology B 4

Lecturers

Prof. Tal Pupko, Prof. Dorothee Huchon, Prof. Nir Ohad

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Semester

Spring

Short Description

This course introduces students to the principles of evolution and species diversity, covering the worlds of microbiology, animals and plants.

The course text book is *Biology* by Campbell. 11th edition:

- 1. Chapter 21: How evolution works
- 2. Chapter 23: Microevolution
- 3. Chapter 22: Phylogeny reconstruction
- 4. Chapter 20: Evolution of Genomes I
- 5. Chapter 20: Evolution of Genomes II
- 6. Chapter 24: Species & speciation
- 7. Chapter 25: Macroevolution
- 8. Chapter 26: Viruses
- 9. Chapter 27: Prokaryotes
- 10. Chapter 27: Prokaryotes
- 11. Chapter 28: Evolution of eukaryotes
- 12. Chapter 31: Fungi
- 13. Chapter 32: Animal diversity
- 14. Chapter 33: Invertebrates
- 15. Chapter 33/34: Vertebrates
- 16. Chapter 34: Vertebrates
- 17. Chapter 29: Evolution of Non vascular plants
- 18. Chapter 30: Evolution of Seed plants
- 19. Chapter 35: Plant structure & growth, from cells to tissues
- 20. Chapter 35: Plant structure & growth, organ formation
- 21. Chapter 36: Water Transport in vascular plants
- 22. Chapter 37: Reproduction of flowering plants, from flower to seedling development
- 23. Chapter 38: Plant signaling & Plant Hormones
- 24. Chapter 39: Plant Phototropism and gravitropism
- 25. Plant transformation and Biotechnology



Short Syllabus



Final grade components

Course requirements and final grade:

The grade in the course will be based on 15% grades from quizzes (a total of 3 quizzes, 5 points each) and 85% from the final exam (0.85*exam grade + 0.15*average-quiz-grad). Should the exam grade be higher than the quizzes' grade, the final grade will be 100% exam.

Quizzes and final exam are in-class.

Quizzes

There will be three quizzes covering the different parts of the course. Each quiz will take 30 minutes and will include up to 18 questions, of which at least 6 will be taken from Pearson's dynamic module questions. We thus recommend the student to answer Pearson's dynamic module questions following the completion of each chapter.

Attendance

Attendance is mandatory. Students are permitted a maximum of three absences without penalty. Any additional absences will affect the final grade and may result in failure of the course.

Academic Conduct

Plagiarism is taken extremely seriously. Any instance of academic misconduct which includes: submitting someone else's work as your own; failure to accurately cite sources; taking words from another source without using quotation marks; submission of work for which you have previously received credit; working in a group for individual assignments; using unauthorized materials in an exam and sharing your work with other students, will result in failure of the assignment and will likely lead to further disciplinary measures.

Additional requirements